

User Manual



Power Supply Unit FST-160

Generalvertretung Deutschland:

TESTEC

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Dear Customer,

Thank you for purchasing Finero test and measurement equipment. Finero is obliged to provide you with the best on the market available test and measurement equipment. The 30 years of Finero experience in most demanding production applications is made available to you in this piece of equipment.

We are confident that this equipment will support your endeavors to keep up the good quality of your production.

If you have any comments about Finero products, software or services I would like to hear of them.

Yours truly,

Risto Vuolle
Chief Executive Officer

Finero Inc.
Kausala, Finland

All information is subject to changes without prior notice.

DELIVERY SCOPE LIST

Although Finero packages the equipment with utmost care you should check the package regarding any delivery damages. If the equipment is damaged you should contact your insurance company directly and inform Finero as well about the matter. Please include photos if possible.

The package should include in minimum following documents and materials:

FST-160	1 pc
Mains cable	1 pc
User Manual	1 pc

1 TECHNICAL INFORMATION

Type :	Power supply unit FST-160
Serial number :	See the back of the device
Size :	483x148x410 (width, height, depth) Designed to 19"-eurorack, height 3U 133mm without legs
Weight :	7-20 kg, depends configuration
Operation voltage :	230VAC ($\pm 10\%$) 50Hz 1~phase
Operation power :	n. 1400VA, depends configuration
Connection :	Cable plug , equipment earth
Main fuses :	6,3A slow 5x20mm glass fuses inside of power connector, depends configuration
Environment temperature :	+5°C...+35°C
Environment conditions :	Dry and no dusty
Outputs :	4 pcs 230V sockets 2 pcs 230V sockets with filtering (max 3A)

2 GENERAL

2.1 Device

Power unit are use to connection mains voltage to testers and computers or some other devices. There are emergency stop button and socket to external emergency circuit. External components can be example emergency stop buttons, door switches, fence switches or limit switches. There can be some other customer configuration, example powers, meters, indicators or relays.

2.2 Construction

The Tester is built in a 19" frame having high of 3U. The installation depth is about 370 mm. Also front panel components are about 40mm. There are handles of tester both sides and legs below tester. Legs must be take off if tester assembled to 19" rack.

2.4 Development

Due continuous development we reserve the right to make technical modifications to our products without notice. Device's activity can deviate to some degree in this instruction from the said resulting customized or other changes.

2.5 Accessories

There are available different accessories, systems and calibrators for test device. Please make contact to us for more solutions.

3 SAFETY PRECAUTIONS

3.1 General

The operator should study carefully the instruction manuals and operation of the Tester as well as testing instructions for the product to be tested before starting any tests. As safety precaution the operator should be aware of emergency first aid actions. Cables and connectors must be enough voltage and current strong.

4 INSTALLATION

4.1 General

The Tester is designed for standard 19" rack or case. The Tester height is 3U (133 mm). Depth is about 370 mm including rear connectors. The handles mounted on the front panel are elevated about 40 mm from the panel. The Tester is not allowed to carry from the handles but by having a stable hold in the frame. The Tester can be used in its own case only in dry and clean environment but care must be taken nothing goes into the case through ventilation openings. The ventilation, however, should not be prevented.

4.2 Mounting into 19" module –rack or case

When installed into a rack or a similar case it is mandatory to use mounting rails due to the weight of the device. The holes in the front panel are intended for locking the device in its place not for backing the whole device. If there are legs below of tester, they must take off before installation to 19" rack. Care must be taken of the air circulation in the rack in order to avoid temperature rise above +35°C.

Here are some examples of how build the support for rack installation.



4.3 Connectors

All other connectors are done with customer configuration. Wiring diagram are shown later in this manual. Make external connections with diagram and use suitable cables and connectors. External emergency circuit are done with 230V cables and connectors.

4.4 Mains supply

The Tester is designed for 230 VAC 50 Hz mains. Connect the Tester to the mains supply in following order:

- Check the position of the front panel POWER switch is 0.
- Connect possible the control and high voltage cables to the Tester.
- Plug the mains cord to the Tester.
- Plug the mains cord to a mains outlet.

5 OPERATION

5.1 General

Check emergency stop button and external emergency circuit. Then turn 0-1-Start switch position 1, now filtered socket are powered. Turn switch for a while to Start-position to connected power to testers and same time indicator in switch are lighting. Switch can return to position 1. Power are connected off, when turn switch to position 0. Emergency stop button breaking power from tester sockets, not from filtered sockets. Button must return before try starting power again.

6 MALFUNCTIONS

6.1 No indicator is lit

Check the power cord connectors are properly plugged at both ends

Check the voltage in the mains socket.

Check the main fuses (F1 and F2) of the Tester. The fuses are located in the fuse box below the power cord connector. The box can be opened by removing first the mains cord and then pulling the fuse box about 10 mm outwards. The fuses will be raised slightly. Check the fuse by a multimeter and replace with the similar one if necessary.

6.2 Tester cannot be powered

Check emergency stop button and external emergency circuit.

If the above remedies do not help, contact the Tester service.

7 WARRANTY

The warranty period is one year from the date of delivery. The warranty includes free repair of construction, manufacture and raw material faults and the damages caused by them. Damages to other devices are not in this warranty.

The warranty does not include the faults caused by:

- transportation
- overload
- user irresponsibility, negligence of operation instruction, maintenance or service
- supply voltage variation (max. allowed $\pm 10\%$) f.ex. caused by thunder
- ambient temperature or moisture
- repairs and modifications made by the other part than Finero Oy
- the repair of faults insignificant for operation as surface scratches
- change of the parts wearing in normal use as indicators

Due to continuous development of the products warranty does not include updating of features.

When the warranty repair is booked the customer is required to inform type and serial number of the equipment and description of the malfunction as detailed as possible. The repair shall be carried out in reasonable time during normal working hours. If immediate repair is demanded or done out of normal working hours the extra cost may be born to the customer account. The warranty repair are done primarily at the manufactures premises.

WIRING DIAGRAM

